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(54) Title: EXTRACTION OF OXYGENATES FROM A HYDROCARBON STREAM

(57) Abstract: This invention relates to a commercially viable process for extracting oxygenates from a hydrocarbon stream, typically a fraction of the condensation product of a Fischer-Tropsch reaction, while preserving the olefin content of the condensation product. The oxygenate extraction process is a liquid-liquid extraction process that takes place in an extraction column using a mixture of methanol and water as the solvent, wherein an extract from the liquid-liquid extraction is sent to a solvent recovery column from which a tops product comprising methanol, olefins and paraffins is recycled to the extraction column, thereby enhancing the overall recovery of olefins and paraffins.



A. CLASSIFICATION OF SUBJECT MATTER IPC 7 C07C7/10. C10G21/16

According to International Patent Classification (IPC) or to both national classification and IPC

#### B. FIELDS SEARCHED

 $\begin{array}{lll} \mbox{Minimum documentation searched} & \mbox{(classification system followed by classification symbols)} \\ \mbox{IPC} & 7 & \mbox{C07C} & \mbox{C10G} \\ \end{array}$ 

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, WPI Data, PAJ, CHEM ABS Data

Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
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X	US 4 603 225 A (COLAIANNE JAMES ET AL) 29 July 1986 (1986-07-29) column 2, line 66 - column 3, line 8 claims 1-12	1-16
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X Further documents are listed in the continuation of box C.	Patent family members are listed in annex.
Special categories of cited documents:      A* document defining the general state of the art which is not considered to be of particular relevance      E* earlier document but published on or after the international filing date      L* document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)      O* document referring to an oral disclosure, use, exhibition or other means      P* document published prior to the international filing date but later than the priority date claimed	<ul> <li>*T* later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention</li> <li>*X* document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone</li> <li>*Y* document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.</li> <li>*&amp;* document member of the same patent family</li> </ul>
Date of the actual completion of the international search  30 August 2004	Date of mailing of the international search report  14/09/2004
Name and mailing address of the ISA  European Patent Office, P.B. 5818 Patentlaan 2  NL - 2280 HV Rijswijk  Tel. (+31-70) 340-2040, Tx. 31 651 epo nl,  Fax: (+31-70) 340-3016	O'Sullivan, P

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